Application No.: 10/849,683

Response to Office Action of 06/24/2005

Attorney Docket: NORTH-601B

Amendments to the Specification:

Please amend paragraphs 27, 28, and 31 as follows:

[027] A completed preform 10A is shown in Figure 3, having a curved length 26, with a radius 28. To accomplish this, the upstanding legs 12 and 14 are pushed over onto the one of the bottom portions 16 or 17 as shown in Figure 14. The folded preform is then placed place in the die 30 shown in Figures 4 which includes a cutter head 31 and an receiver pad 32. The cutter head 31 incorporates staggered blades 33 32 having a width 34 33 as shown in Figure 4 Figure 5 slightly greater than the width of the warp threads 20, allowing for some mismatch in warp thread location. This allows the warp threads 20 to be cut (darted) periodically into segments such that the cuts in each tread are spaced from the cuts in the adjacent treads as shown in Figures 6. The spacing 35 of the cuts should be as large a distance as possible, but still allowing the curved length 26 to be formed. Thus some experimentation may be required to obtain the optimum spacing.

[028] Referring to Figures, if If the part is to be simply curved shape as shown in Figure 3, the darted preform 10 is folded as shown in Figure 14 Cactus with the legs 12 and 14 bent over on to leg 16. The preform 10 is placed in a sine-wave shaped die assembly 40 having matched die halves 41 and 42 with mating sign-wave shaped forming surfaces 43 and 44 respectively. The sign-wave pattern is on forming surface 43 is tapered from ends 45 and 46 on die half 41 and the forming surface 44 is tapered from ends 47 and 48 on forming surface 44. What the sine wave forming accomplishes is a stretching that is zero at the end of bottom portion 17 and a maximum at the end of bottom portion potion 16.

[031] If on the other hand, the preform final shape shown in Figure 12, and designated by numeral 10C, is desired, then, as illustrated in Figure 13, the legs 12 and 14, and portions 16 and 17 are brought together as in the previous example, and placed in the die assembly 40B having die halves 41B and 42B with forming surfaces 43B and 44B. However, stretching is accomplished by placing the folded preform 10 in the sine-wave dies such that stretching of the legs 12 and 14 is a minimum at there

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ends and becomes a maximum at the center. Thereafter, stretching of the bottom portions 16 and 17 is held constant.

Please amend the abstract as follows:

(036) The invention is a process for forming a preform for use in a structure having at least one curved portion of a specific length, including the steps of: 1) providing a preform having cable of expanding in length threads in rows parallel to the direction of curvature over a length equal to the length requiring curvature, such that the gaps between each thread row are spaced from the gaps in the adjacent tread rows; and)2

2) stretching the portions of the preform requiring curvature in a sine-wave pattern.